Chapter 5

Changing Patterns of Television Use

It is difficult to overstate the pervasiveness of American television. Virtually all children in the United States have television sets in their homes. *TV Guide*, with program listings and feature articles about television, is the largest-circulation magazine in the United States. The average home set is on more than six hours a day. Most children watch television every day and are likely to watch at least two hours daily. One research team found that, as early as the late 1950s, the typical child, during the first 16 years of life, spent, in total, as much time with television as in school (Schramm, Lyle, and Parker, 1961).

But it would be a mistake simply to equate pervasiveness with impact. Within the broad generalizations about the widespread use of television are a multiplicity of variations. While television viewing is still a family-shared experience, more than one-third of U.S. families now own more than one television set (up from one-quarter of families five years ago). This figure is higher among larger families and among families with higher incomes and more education. The increase in multiple-set homes and the different patterns of viewing among different age groups and different ethnic and socioeconomic groups make average daily viewing time for individuals a misleading statistic.

Data from the LoSciuto (1971) survey show that most adults report watching television for at least two hours daily. Many, of course, say they watch more, while up to 20 percent of American adults say they do not watch at all on a given day. Women tend to report more viewing than men, probably because many women work at home where they have easy access to television sets.

Among children, frequent viewing begins at about age three and stays relatively high until age 12, then gradually declines. Viewing frequency reaches its low point among teenagers. With the onset of marriage and family formation, time spent viewing television increases, remaining stable through the early and middle adult years and rising once again after middle age when grown children leave home (Robinson, 1971b).

Most children watch some television every day. Like adults, most watch at least two hours a day, although many watch considerably longer. On the other hand, more than one-quarter of the sixth graders Lyle and Hoffman (1971a) studied reported that they watched no television "yesterday," and similar numbers in other age groups reported no viewing at all. But regardless of age, more than one-quarter of the children said they watched more than five hours on school days.

According to these studies, many elementary school pupils watch television before (one-fifth of Lyle and Hoffman subjects) and after (two-thirds of Lyle and Hoffman subjects) school as well as in the evening. Older children (sixth and tenth graders in the Lyle and Hoffman study) watch evening television through most of the prime time period as well as during the early evening "family" viewing period.

Several studies made before this research program was launched showed that children of lower socioeconomic status tended to spend more time watching television than children of higher economic status (e.g., Greenberg and Dervin, 1970). Some evidence from the present research (McIntyre and Teevan, 1971) supports this conclusion. Lyle and Hoffman (1971a) and McLeod et al. (1971b) found, however, that viewing differences based on socioeconomic status were minimal— much smaller than differences found in similar studies ten years ago.

THE DIFFUSION MODEL

What happens when an innovative medium of mass communication becomes universally adopted by a society?

Over the past 20 years, the medium of television has moved closer and closer to universal adoption. During this period, the phenomenon of television has evolved in much the same way radio listening evolved between the 1920s and 1940s, from a central to a peripheral activity.

When television was new in the early 1930s, viewing was group-centered, attention was focused, and interest was high. From the middle 1950s (when about half of American homes had television sets), to the mid-1960s (when more than 90 percent of homes had sets), the nation was saturated with television broadcasting. Everyone watched, but television became less "magic" and more commonplace. An audience which may once have altered its living patterns around the new medium now seemed to reverse the process and fit the medium to their living pat-

terns. Attention to the set has become more diffused; viewers seem to be more easily distracted (Bechtel et al., 1971; LoSciuto, 1971; Lyle and Hoffman, 1971a; Murray, 1971; Ward, 1971).

We may be entering a third evolutionary phase, one whose key characteristic is differentiation. Technological advances in miniaturization and the use of new materials have lowered the cost of television sets and made television portable and "personalizable." Multiple sets in homes make possible differentiated and specialized audiences.

As cable systems proliferate and make very large numbers of video channels available, audiences and programs may become increasingly specialized: one station may broadcast all sports, another all news, another all Spanish music and drama, and so on. In cities like New York where cable has made up to 25 channels available, we see channels specializing in stock market reports, continuous news, weather, public service announcements, and films. Future audiences may come to depend on television for very specific information and for specific types of entertainment.

Viewers' uses of television have been changing constantly ever since the medium was first introduced. As they continue to evolve in the future, we will need to develop new research approaches and new methods of evaluating the entire viewing process. A number of questions still remain unanswered. For example, how and why do viewers choose specific programs; indeed, how do viewers choose whether to watch at all?

TO WATCH OR NOT TO WATCH

Because television is ubiquitous in America, and because so many individuals appear to spend large segments of time with the medium, there is a tendency to look upon viewing television as a rather universal, global, nonrational, automatic manifestation of behavior. To the degree that many aspects of viewing television are indeed analogous to a "habit," some surface truth rests in such observations. On the other hand, when one probes the viewing process more deeply, one recognizes quickly that all is not as simple as it appears to be.

The potential viewer of any given television program always is faced with a number of options which call for active decision-making on his part. In its crudest form, the initial option hinges on whether the potential viewer chooses to watch television at all or whether he or she wil engage in some other activity. Here the initial decision turns on a variety of factors, among which are the time of day; day of the month; season key sociodemographic attributes such as age, sex, educational level occupation, and economic status; key "taste" considerations such a: whether the potential viewer falls into either the "high," "middle," o "low-brow" rubric; and key psychophysiological variables such a

fatigue, mood, need for relaxation or stimulation, need for information, ennui, or feelings of loneliness. Undoubtedly, many additional variables too numerous to cite operate in determining the initial "to view or not to view" choice.

If, after sifting through all these filters, the individual decides to view television rather than to engage in other activities, he is then faced with several secondary decisions. For example, he must choose from among a number of programs that may be available to him at any given time. In order to do this he must first find out "what's on television," by referring to newspaper or magazine program logs, by inquiring from other individuals, by remembering a previous viewing experience, or by simply twisting the television receiver dial in random fashion until he finds something of interest to him—provided, of course, that he has the option of determining what program will or will not be tuned in at a given time. At any point in this process, the potential viewer may decide that there is "nothing on television" and refrain from tuning in.

Where he finds that the receiver is in the control of others, the potential viewer is forced into still another set of decisions: to view the program chosen by someone else; to seek out another receiver over which he can exert personal control; or not to view television at all for a specified period of time.

The decision to view a given program at a given time is to a major degree dependent upon key variables of time, demographic-sociological characteristics, social milieu, personal taste, psychophysiological attributes, past experience with similar programming, content-related expectations, and the content-related gratifications the viewer derives as he watches the program in progress. Once he has tuned in a program, the viewer can choose, at any moment, either to continue watching a given program or not to continue. "Audience flow" data gathered by television audience measurement services show that there is considerable shifting into and out of specific programs (particularly variety programs) by substantial audiences while the program is being aired. Another alternative equally available to the viewer who finds a given tuned-in program not to his liking is to cease viewing altogether—at least temporarily.

Even after the viewer has settled into a given program for much or all of its duration, he is faced with the entire choice cycle all over again at the point of its termination. Should he continued "to watch television" —and if so, what shall he tune in, and for how long?

The fact that considerable choice can be, and probably often is, exercised in the complex matter of viewing television necessarily gets us away from the simplistic notion that television viewers are completely captive automatons whose only option is to "respond" to everything that the medium projects. Even though the alternatives offered by television are not infinite, there remains room for a certain amount of real

choice on the part of viewers. Ultimately, the decisions *not* to watch television or *not* to watch particular television programs are always realistic options.

LEVELS OF ATTENTION

How does an American family watch television? Figure 1 shows what two minutes in one family's living room looked like. This minute-by-minute description of a family watching television documents the complexity of the activity we call "watching television" (or "viewing," or "exposure"). The degree of attention to the television screen is constantly varying. Bechtel et al. (1971)—from whose report the above description is taken—filmed a number of Kansas City families as they watched television. These researchers divided the activities they saw while the television set was on into six levels of attention:

1. Participating, actively responding to the television set or to others regarding content from the set.
2. Passively watching (doing nothing else).
3. Simultaneous activity (eating, knitting, etc.) while looking at the screen.
4. Positioned to watch television but reading, talking, or attending to something other than television.
5. In the viewing area but positioned away from the set in a way that would require turning to see it.
6. Not in the room and unable to see the set.

Bechtel et al. assert that up to half the time the television sets were on, the viewers they observed fell into one of the last three categories—indicating, essentially, that they did not "watch"—even though they may have reported later (via questionnaire) that they had watched the program being broadcast. Moreover, the researchers catalogued an extensive list of activities the people who did "watch" were simultaneously engaged in—activities which ranged from eating and conversing to studying and sleeping.

Lyle and Hoffman (1971a) note that students say they are likely to study while watching television. Fewer than 20 percent of the first graders Lyle and Hoffman interviewed said they never did other things while watching television. Murray (1971) reports numerous activities accompanying viewing behavior. In a study where children were observed while they watched television, eye contact with the television screen diminished markedly in a situation where the television program had to compete with other attractions like books, games, and toys (Foulkes et al., 1971).

TIME	Tommie	Jamie	Mother	Father
28'	He is watching TV with close attention.	Out	Out	He turns his head to ask a question. He moves the newspaper and looks back at it.
28'30''	Rests his hand on his leg. He wipes his nose with his arm and looks at his brother and father.	Returns and sits on couch. He sits all the way back with his feet stretched straight out and his hands between his thighs. He watches T.V.	Enters living room carrying an article of clothing on a hanger. She glances at TV.	Looks up as Mrs. Barker passes through. (At the same time TV says' "Hey look over there." He watches TV set for ten seconds, then turns back to newspaper. He looks up at set again. (There is marching music on TV.)
29'	Says something to Jamie and something to his father. He leaves the room after looking at them.	Watches TV intently. Answers his father's question and looks at him for a few seconds.	Carries article of clothing on hanger into another room.	Takes his hand off his head and looks at the boys. He asks something about what is on television. He then moves his legs slightly.
29'30''	Returns and sits on couch. He places one leg out and tucks the other underneath him. Wiggles his foot a little.	Flutters his feet as a swimmer does and then stops. Still watching TV.	Returns to the living room, stands in the doorway and pays no attention to TV. She seems to be clearing something from the table.	He holds the newspaper up; hard to tell if he is looking at it or at the television set.

Figure 1: Two minutes of family viewing

According to this evidence, although television is omnipresent in American homes, it often does not receive the full attention of adults and older children. This observation probably does not apply, however, to young children. For example, it is difficult or even impossible for young children to monitor both a conversation and a television program.

TELEVISION'S IMPACT IN CHILDHOOD

We do not ordinarily think of family mealtimes, play in the neighborhood, and visits in other homes as "episodes of social learning," but in fact a byproduct of these activities *is* social learning. The fact that no one is labeled an "instructor" and the child is not labeled a "pupil" does not gainsay the fact that the child is learning in these situations. He is learning how to behave, what to do to please other people, ways that he may displease them, how to gain attention from adults, how to carry on conversational give-and-take, how men and women behave, and so forth.

How does the time a child spends watching television affect his opportunities for social learning and for direct interpersonal contact? And to what extent does social learning take place as a consequence of watching television?

The first question is more easily answered than the second. Much of the time children now spend watching television is simply the time which earlier generations of children devoted to such other media as movies, comic books, and radio (Himmelweit, Oppenheim, and Vince, 1958; Lovibond, 1967; Schramm, Lyle, and Parker, 1961). But some of it is time which formerly might have been spent in social activities, play with other children, daydreaming, listening to adult conversation, and other unsupervised activities. Important changes in children's psychological functioning may result from this redistribution of their time in waking hour experiences.

While the child is paying exclusive attention to television (and this by no means occurs universally), he is observed to be physically inactive. He has no opportunity to ask questions of those he sees on the screen. He has no need to plan what he will do next, or how he will carry out his plan of action. There is no way he can change the pace of the action on television or divert the inexorable unfolding of events before him. Whether he smiles or frowns, whether he looks puzzled or enlightened, whether he shows amusement or fright, whether he approves or disapproves, the events roll on. This is a situation very different from his usual social experiences, in which he can participate actively and directly. The events he watches on television are exciting and attention-catching, but his own role is limited to that of a spectator or bystander.

Some evidence points to a relationship between television viewing and reduced activity (i.e., "passivity"). A study conducted in the 1950s in Great Britain (Himmelweit, Oppenheim, and Vince, 1958) found little difference in passivity among children who were viewers of television and those who were nonviewers. However, within the group of children who were television viewers, the children described as television "addicts" were likely to be somewhat more passive. Himmelweit et al. consider that the passivity is essentially a product of environmental and personality factors, but that it may be increased by the opportunities for withdrawal offered by television. Essentially similar findings are reported by Schramm, Lyle, and Parker (1961) and Murray (1971). The latter study indicates that the passive child who is a heavy television viewer at age six was also a relatively passive child at age three, but information on the three-year old's television viewing is not available.

As both Lyle and Hoffman (1971a) and Murray (1971) document, not only do children begin viewing at a very early age, but they also begin to develop program preferences and habits almost as soon as they commence viewing. By the first grade, a majority of boys and girls are already showing patterns of program selection and preference for characters.

Among the younger children (Lyle and Hoffman, 1971a) the most popular programs are situation comedies and cartoon shows. The sixth graders like family situation comedies and give increased attention to adventure programs. Tenth graders prefer adventure programs and music/variety shows. Children of all ages are attracted to shows featuring characters their own age. All the studies reporting program preferences among black primary and secondary students show strong preferences for programs featuring blacks.

The studies in this research program which asked children or adults which programs they watch report relatively little viewing of educational programs. Viewing figures for *Sesame Street*, which has won wide critical praise, were not available when most of these surveys were made. However, Lyle and Hoffman (1971a) found some evidence of sizable first-grade viewing of *Sesame Street*: the program's characters were more frequently recognized by first graders than were characters on several popular commercial programs. Lyle and Hoffman (1971b) also found *Sesame Street* was the second most frequently named as favorite program (after *The Flintstones*), among the preschool-age children they interviewed. This finding is all the more impressive because these were the only individual programs named by sizable proportions. According to Lyle and Hoffman, young viewers avoid news programs almost totally.

WHY PEOPLE WATCH TELEVISION

As we have pointed out, for many viewers of all ages television is a discontinuous activity. For the most part, television "fills time," but it

does so in a way which many viewers feel is a useful experience (Lyle and Hoffman, 1971a; LoSciuto, 1971; Robinson, 1971b). Primarily, of course, people say they use television for relaxation and pleasure (Robinson, 1971b). A small proportion (ten percent, according to Robinson's overview of five studies of primarily adult viewers) say they watch specifically in order to be informed or educated. But at the same time, the studies suggest, viewers believe they are learning about the world, about how to handle social situations, about how to cope with personal problems.

In several survey studies, mothers reported that they thought their children were learning from television: increasing their vocabularies, preparing for school, and learning "about life."

Precisely what they do and do not learn about life is unclear. But they certainly do learn names of products and can identify packages from commercials, according to Lyle and Hoffman (1971a), Murray (1971), and Ward (1971). A very large number of children, beginning at preschool age, can recognize characters in television programs. (Only about 5 percent of the first graders Lyle and Hoffman surveyed, for example, did not know Gilligan of *Gilligan's Island*.)

Adults, as well as children, tend to identify most strongly with characters like themselves—characters of their own age, their own sex, their own race.

Most viewers, according to LoSciuto's survey, see dramatic television programs as generally realistic portrayals of the world as it is. They seem to feel that the behavior of television characters in fictional situations in dramatic programs is reasonably true-to-life and that watching these programs can give clues about socially acceptable behavior. Fifth and eighth graders in Greenberg and Gordon's (1971a, 1971c) studies reported that they thought certain portrayals of filmed violence to be "realistic."

The children studied by Lyle and Hoffman (1971a), on the other hand, were less convinced of television's "reality." Even in first grade, about half the children expressed doubts about the realism of dramatic programs. Among older children, about one-quarter were markedly skeptical about the truthfulness of television news programs.

As a child grows older, he becomes more proficient at the task of distinguishing fantasy from reality, fact from fiction. Identifying the half-truths and the less-than-half-truths becomes important for the adolescent. Indeed, he is an expert at spotting a "phony." Lyle and Hoffman suggest that older children are very suspicious and distrustful of television commercials.

The origins of this distrust and cynicism are difficult to trace. However, one study (Ward, 1971) indicates that they are related to a "consumer awareness" formed from the child's experience with advertising generally and with television advertising specifically. More broadly viewed, they may also, in part, be a reflection of a much more widespread loss of

public confidence in the institutions of our society. As a broad indicator of public confidence, a recent survey (Harris, 1971) compared attitudes toward 16 major social institutions (such as religion, education, government, labor, media, science, and business) with attitudes measured five years earlier. Without exception, public confidence in these institutions was sharply down. Thus, evidence of current skepticism is not confined to television or to the young.

While the development of skepticism may be part of normal psychological maturation, it is possible to interpret these observations in at least two diametrically opposed ways. On the one hand, it is possible to speculate that early experiences with questionable television advertising engenders a high degree of cynicism among youthful viewers which may reflect itself ultimately in a general sense of distrust and alienation. In contrast, these kinds of early experiences may very well be viewed as helping to develop the kind of healthy skepticism that will serve to immunize viewers against propaganda.

YOUNG VIEWERS AND THEIR PARENTS

Parents usually exert little influence over their children's viewing. Our data indicate that in an overwhelming majority of families, the children control the use of the television set through the early evening (Lyle and Hoffman, 1971a; McLeod et al., 1971b). Indeed, one study reports that parents often ask advice from their children when they select early evening programs (McLeod et al., 1971b).

In their relationship with their children, parents are in a position to play the role of gatekeepers, allowing what they approve and barring what they do not. If parents exert very little control over what their children choose to view on television, it is possible that they do not disapprove of those choices too strongly. It is also possible that they wish to avoid family conflict and to prevent frustration and feelings of deprivation in their children. However, it is important to note that parental attitudes toward and comments about the *content* of television may have considerable power as mediating influences between the messages projected and their possible influences on young children. It is here, rather than in the area of controlling what their children are to view in the first place, that parental gatekeeping may be of primary importance.

Chapter 6

Television and Violence in the World of Children

The fact that young children extensively view television raises important questions about the role this medium plays in the child's life. Television can be a major force in teaching the child about the complexities of the world around him. Indeed, some producers of television drama claim that they attempt to depict many aspects of life—its problems, happiness and joy, sadness and violence. However, while most people recognize television's potential for providing the child with a broad range of experiences, there is much public concern about the possible harmful effects of television entertainment. This concern focuses on the possibility that particular aspects of television viewing will overstimulate the child, lead to disturbed sleep and nightmares, or incite the child to aggressive behavior. For example, the National Center for Health Statistics reports that a survey of the parents of approximately 7,000 children between the ages of six and 11 years indicates that the sleep disturbances of more than one out of four children are considered by the parents to be related to television and radio programs (Roberts and Baird, 1971).

In addition, many teachers of young children, especially at the nursery school level, suggest that television viewing may have negative as well as positive aspects. While recognizing its potential for entertainment and cultural enrichment, they feel that television viewing may be a "cop-out on learning." Their view is consonant with early beliefs on the parts of some researchers that television may reduce creative or productive activities (Maccoby, 1951). Later studies indicate that the relation-

ship between very heavy viewing and low interest in other activities may be a manifestation of preexisting personality and familial factors in the heavy viewer, and may constitute "a vicious circle" in which these factors lead to heavy viewing which in turn reduces the child's contacts with others (Himmelweit et al., 1958).

For convenience, one can differentiate between the general effects television may have on the child's intellectual and emotional life and television's more specific impact on the child's aggressive behavior. This chapter attempts to summarize and interpret the available experimental evidence on the impact of televised violence on children.

If viewing televised violence leads to an increase in the viewer's aggressive behavior, it may do so either by "teaching" novel aggressive acts which can be learned and *imitated* or by *instigating* aggressive behaviors which have previously been learned. Studies on the imitation of aggressive behavior usually focus on identifying the stimulus conditions under which a child will mimic or copy the behavior that he has just observed on television or in real life. Research on the instigation of aggressive behavior assesses the postviewing incidence of any aggressive behaviors, not just those which mimic the behavior the child has previously viewed.

IMITATION OF MEDIA VIOLENCE

A child may acquire a new item of behavior through attentive observation. Rehearsal or practice of this new skill increases his competence. If the initial attempts are rewarded or encouraged, the child is likely to continue to perform the newly acquired behavior. If they are punished, he is less likely to persist, especially while he is under the surveillance of the punisher. Observation, imitation, then practice is a common sequence through which new behaviors enter the child's repertoire.

Throughout human history, very young children have been able to learn from imitating the behavior of others in their presence. These others might be members of the household, friends of the family, neighbors, playmates, teachers, priests, etc. With the advent of the modern pictorial media of communication, children can now also see the behavior of individuals who are not personally present but whose images are conveyed via film or television. We use the term "models" for individuals whose behavior children can observe and thus imitate, whether these individuals are personally in the child's presence or are observed by him through the media.

The child with a television set in his own home has the opportunity to observe the behavior of many diverse models. In forming impressions of how adult males normally behave, for example, the young boy of today

may rely not only on observing the behavior of his father and his uncles, the repairman and deliveryman who come to his house, his doctor, and other men in his life, but also on observing television newscasters, comedians, actors, musicians, and cowboys in westerns, and so forth. The very young child today is exposed to more different models of masculine behavior than any child in human history, in part because of the television set in his home.

Because psychologists have been concerned with the amount of aggression and violence available to children in the mass media (and particularly on television) and with the possibility that youngsters will imitate this aggression in their own behavior, many experiments have studied children's copying of aggressive behavior. Typically in these experiments, one film shows distinctive and novel aggressive behaviors, while another film—similar in length, use of color, identity of the actors, and the character of the situation—does not feature aggressive behavior. The different children who watch the two films are then compared for their aggressive behaviors in sessions conducted after the showing of the films. Careful records are made of the acts which do or do not mimic the distinctive aggressive behaviors just displayed in one of the films but not the other.

Albert Bandura pioneered studies of this sort over ten years ago. Since the publication of his original work (e.g., Bandura and Walters, 1963; Bandura, Ross, and Ross, 1961), many psychologists in the United States and abroad have conducted similar experiments. There are now about 20 different published experiments concerned with children's imitation of filmed aggression shown on a movie or television screen (Appendix C). All of these studies demonstrate that young children can, and under some circumstances do, imitate what they observe on television or in films. Whether they actually do imitate depends on many factors, including inhibition, social pressures, and socially approved role models. The fact that children can mimic film-mediated aggressive behavior is perhaps the best-documented finding in the research literature on the effects of the pictorial media.

Many other experiments show children's imitation of other kinds of behavior. Some of these show copying of film-mediated behavior, while others show mimicking of a live person. These experiments buttress the findings of the many studies directly concerned with aggression. Psychologists generally consider quite convincing the evidence that children can readily learn many kinds of behavior, including aggressive actions, by attentively watching those behaviors being modeled by persons in their presence, on film, or on television. In this vein, after reviewing the literature, Weiss (1969) pointed out that "there is little doubt that, by displaying forms of aggression or modes of criminal and violent behavior, the media are 'teaching' and people are 'learning.' "

MEDIA INSTIGATION OF AGGRESSIVE BEHAVIOR

The distinction between imitation and instigation is crucial to a precise understanding of the influence television may exert on the behavior of the viewer. In the previous section we summarized prior research on the imitation of acts portrayed on television or in films.

The new research in this program was commissioned after the phenomenon of imitation of aggressive behavior portrayed on film had been well demonstrated. These new studies do not concentrate on adducing additional evidence for it, though other new studies will undoubtedly provide further documentation of this phenomenon. Rather, current research focuses on the conditions under which children *will* carry out the aggressive behavior we already know they *can* imitate. Given that children can imitate the aggressive behavior they observe, what are the inhibiting or disinhibiting factors that make it more or less likely they will do so? In this section we will review the findings of recent research which bear on the issue of television's role in stimulating or instigating antisocial aggressive behavior in children.

During the past decade, a large number of studies have examined television's role in facilitating or encouraging aggressive behavior. Many of these studies deal with aggression in children; another sizable group focuses on the aggressive behavior of older youth and adults. The results of approximately 30 previously published experiments (Appendix D) have been widely interpreted as supporting the thesis that children or adults who view violence in either films or television programs are more likely to behave in an aggressive or violent manner than those who do not view such fare (Baker and Ball, 1969). However, some reviewers have questioned this interpretation and suggest that additional research is needed before the question of the impact of televised violence can be answered (Singer, 1971; Weiss, 1969).

Five reports in this research program focus on television's role in the instigation of aggressive behavior: Stein and Friedrich (1971); Feshbach (1971); Liebert and Baron (1971); Ekman et al. (1971); and Leifer and Roberts (1971). (See Appendix B for brief descriptions of these reports.) The ten separate studies reported by these authors differ in terms of the subjects and specific research procedures. However, the general research paradigm is similar in each study. The typical procedure is to show one group of children films or television programs that contain a number of violent episodes, while another group views relatively nonviolent material. Subsequently, each child is placed in a setting where his behavior may be observed. The specific types of aggressive behavior differed from one study to another, and were not restricted to the mimicking or copying of what had just been observed. The child's aggressive behavior after watching the television program can be quite different in quality and character from the aggressive or violent behavior displayed in the television program.

Virtually none of the prior research dealt with effects of actual television programs. The earlier investigations typically employed a several-minute violent excerpt from a motion picture, severed from its original context. In contrast, much of the new research discussed in this chapter has made use of actual television programs so that what has been presented as television has not been unlike television programs seen in the home. These studies are perhaps more cogent than the prior research for determining the effects of content as it is presented on home television screens.

Most of the prior studies on the instigating effects of filmed violence had used college students as subjects and had assessed each viewer's aggressive behavior in terms of the number, duration, or intensity of electric shocks administered to an ostensible victim (e.g., Berkowitz and Rawlings, 1963; Berkowitz, Corwin, and Heironimus, 1963; and Geen, 1968). In the series of new studies, a wide range of other measures of aggression (including multiple measures within each study) were employed. These measures varied from the administration of painful noise or heat to an ostensible victim to self-report willingness to use physical or verbal force as a means of conflict resolution. In addition, one study obtained naturalistic observations of the physical and verbal interpersonal aggression occurring in the child's daily life.

The likelihood that a viewer—either child or adult—will behave more aggressively after watching aggressive behavior portrayed on film or television has been suggested by the results of a number of prior studies. In a review by Atkin, Murray, and Nayman (1971), the majority of studies, covering various age levels, share the conclusion that viewing violence increases the likelihood that some viewers will behave aggressively immediately or shortly thereafter.

Some reviewers (Hartley, 1964; Klapper, 1968; Weiss, 1969; Singer, 1971) have disagreed with this interpretation. These writers have questioned whether the behavior observed can be regarded as "aggression" in a socially meaningful sense. They note that the subjects are *directed* to administer shocks and that the index of aggression is an extremely small increment in the number, duration, or intensity of the shocks supposedly given. They note also that the subject gets no feedback from his supposed victim, who is unseen and unheard, and that the subjects are in some instances explicitly told that the shocks are mild. These reviewers contend that this behavior, which they see as explicitly authorized, very limited, and involving no violation of social norms, cannot be equated with real interpersonal aggression in the consensual sense of the term, nor regarded as necessarily predictive of such behavior.

Catharsis

Some reviewers and researchers have expressed different views regarding the general effects of televised violence. Feshbach and Singer

(1971) have in fact suggested that viewing televised violence provides an opportunity for the discharge (catharsis) of aggressive feelings and thus reduces the likelihood that the viewer will engage in aggressive or violent behavior. The same prediction follows from an inhibition hypothesis, which holds that exposure to violent content leads to anxiety, guilt, or the greater salience of norms and taboos in regard to aggression, with consequent reduced aggressive behavior.

The theory underlying the catharsis hypothesis (Feshbach, 1961; Feshbach, 1969) stipulates that the child who views violence on television vicariously experiences the violence and thereby harmlessly discharges his pent-up anger, hostility, and frustration.

The Feshbach and Singer (1971) study provides the most comprehensive test of the "catharsis" hypothesis to be published to date. The investigators presented institutionalized adolescent and preadolescent boys with a "diet" of either aggressive or nonaggressive television programming over a six-week period and concurrently measured the day-to-day aggressive behavior of these boys. The results indicated that, in some cases, the children who viewed the nonviolent television programs were more aggressive than the boys who viewed the aggressive programs.

These conclusions deviate from the bulk of research findings in this area. The accumulated experimental investigations sponsored by this program, fail to support Feshbach's theory and conclusions. This type of disagreement can be resolved only when other investigators have repeated the experiment with appropriate methodological refinements designed to control possible sources of error.

Such a replication has recently been undertaken by Wells (1971), and the preliminary analysis indicates that the findings do not confirm those of Feshbach and Singer in reference to physical aggressiveness, although certain other findings are confirmed. Specifically, in both studies, the behavioral differences attributed to television were detected only in the lower socioeconomic level schools. Both studies also demonstrated greater verbal aggressiveness among boys who viewed the less violent programs. But—in a direct reversal of Feshbach and Singer—Wells found significantly greater physical aggressiveness among boys who viewed the more violent television programs. Moreover, the differences he found, in regard to both verbal and physical aggression, were limited to boys who were above average in aggression before the study began. Wells attributes the greater verbal aggression elicited by the less violent program diet to dissatisfaction with the banning of action-adventure programs. He interprets the greater physical aggression elicited by the more violent program diet as a tendency for the action-adventure content to stimulate aggressive behavior. He found no evidence that would support a catharsis interpretation, unless the difference in regard to verbal aggressiveness were so interpreted.

As matters now stand, the weight of the experimental evidence from the present series of studies, as well as from prior research, suggests that viewing filmed violence has an observable effect on some children in the direction of increasing their aggressive behavior. Many of the findings, however, fail to show any statistically significant effects in either direction.

New evidence from the present studies

In the present series of studies, the research that bears most directly on aggressive behavior in the daily life of the child is a controlled experiment by Stein and Friedrich (1971). These investigators observed the daily behavior of three-and-one-half to five-and-one-half-year-olds (52 boys and 45 girls) who had been exposed to a diet of either aggressive, prosocial, or neutral programming. The general design of this study provided for a three-week baseline period during which observers recorded the child's usual patterns of social behavior. During the following four weeks, the children viewed 12 20-minute episodes in one of three "diets" of television or film programming. The *aggressive* programming consisted of 12 installments of *Batman* or *Superman* cartoons; the *neutral* programming consisted of children's films on "nature" or travelogues; the *prosocial* program consisted of 20-minute segments of *Misterogers Neighborhood*, which stressed the themes of sharing, cooperative behavior, and adaptive coping with frustrations. Each child's daily interpersonal behavior was observed throughout the four-week period and continued to be monitored during a two-week follow-up. All observations were conducted in a nursery school (initially a new setting for the child) during normal interaction with other children.

The investigators used several measures of aggression, two of which —physical and verbal—were combined into an interpersonal aggression score. No significant differences were found among the overall effects of the three types of television treatment. Moreover, exposure to the diet of televised violence was found to have no consistent effect on children who had initially displayed a low level of aggressive behavior. Among children who were initially high in aggressive behavior, the difference in the changes that occurred is plausibly interpreted as indicating greater stimulation of aggressive behavior among those who viewed the violent diet than among those who viewed the neutral diet.[1] On each of the two

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[1] This conclusion requires some explanation. When subjects are divided into those with high and low initial levels on any measure and when that measure (or a very similar one) is repeated, it is frequently found that the "initially high scorers" obtain slightly lower scores the second time and the initially low scorers obtain slightly-scores the second time, as a result of a general tendency for imperfectly reliable scores to regress toward the mean. In the presence of the regression effect, it is difficult to assess the amount and direction of

component measures of aggression, the corresponding differences were in the same direction, but not large enough to be statistically significant.[2]

The most striking finding was an increase in prosocial behavior among the children who viewed the prosocial programs (e.g., *Misterogers Neighborhood*). This increase was limited to those young viewers who came from families of low socioeconomic status. These children tended to become more cooperative, helpful, and sharing in their daily relations with others; the children from families of high socioeconomic status did not. Rather, the high-status children showed an increase in prosocial interpersonal behavior after viewing aggressive programming. An analysis of variance revealed a significant interaction between type of program viewed and socioeconomic status (p < .05). The main implications of the Stein and Friedrich research are that even relatively short repeated exposure (20 minutes) to the types of television programs available to children can exert positive or negative effects on the daily life behavior of nursery school children, but that the effects vary for different types of children.

In the Stein and Friedrich study, the age of the children was held constant. In other studies which compared younger with older children, age was an important predispositional factor associated with responsiveness to aggressive television fare. Liebert and Baron (1971) presented chil-

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changes attributable to an experimental variable. The type of regression effect just described seems to run through the data in the Stein and Friedrich study: the children rated as low in initial level of aggressive behavior showed an increase in aggressive behavior while those rated as initially high showed a decrease in aggressive behavior following exposure to television, regardless of which television program they saw. The main finding bearing on the effects of televised violence is that among those children who were initially high in aggressive behavior, those given the diet of televised violence showed little decrease, whereas the children who were given the neutral diet showed much more decrease (enough to be a significantly greater decrease) on one of the combined measures of aggressive behavior (interpersonal aggression). In view of the overall regression effect, this finding is tantamount to finding that exposure to the diet of televised violence gave rise to *relatively* more change in the direction of interpersonal aggressive behavior than exposure to the neutral diet.

There was no corresponding significant difference between those initially high in aggressive behavior who received the *prosocial* diet and those who received either the neutral or the violent diet.

For subjects who were initially low in aggressive behavior, there were no significant differences attributable to variations in television diet.

[2]In another field study, Cameron and Janky reported similar findings. In their study, parents were asked to restrict their child's television viewing to a diet of programs which were either aggressive or passive and then observe his daily behavior. Although serious methodological problems are inherent in this procedure, the results suggest that the child's behavior tended to change in the direction of the type of program content viewed: children who viewed "pacific" programs were adjudged by their parents to become less aggressive, while those who viewed the aggressive programs were adjudged to become more aggressive. Because of the strong possibility of biased judgments by the parents, we cannot give as much weight to this evidence as to the findings from controlled experiments which rely on trained observers who are "blind" about which type of program each child had seen.

dren with an opportunity to either help or hurt another child after they had viewed either an aggressive or a nonaggressive segment of television programming. The experiment was carried out with 68 boys and 68 girls at two age levels: five and six years old and eight and nine years old. Each child individually viewed a six-and-one-half minute "program." The "aggressive" program included three and one-half minutes of *The Untouchables*, preceded and followed by commercials; the "control" program included three and one-half minutes of a track race film with the same commercials. Then, so that aggressive behavior could be measured, each viewer was told that a child was playing a game in another room and that he could either help the other child or hurt him and prevent him from winning the game. The hurtful act consisted of pressing a button which the subject was told would make the handle of a game that the "other" child was playing become very hot and hard to turn. The helpful act consisted of pressing another button which he was told would make the handle very easy to turn and allow the other child to win more prizes. The experimenter emphasized that the longer the child pushed on the "help" button the more·the other child was helped, and that the longer the child pushed the "hurt" button the more he hurt the other child. This procedure provided several measures of interpersonal aggression in terms of duration, frequency, and latency of hurting responses. An additional measure of postviewing behavior was the amount of aggression observed in a free play situation—specifically, play with nonaggressive or aggressive toys.

The results indicate that, in both age groups, children who viewed the televised aggressive episode demonstrated a greater willingness to engage in interpersonal aggression against an ostensible child victim. The five- and six-year-old children who viewed the *Untouchables* episode aggressed sooner and for a longer time than those who viewed the track race episode. For the older children (eight and nine years old), those who viewed *The Untouchables* also showed significantly longer duration of aggressive responses than the equivalent controls, but they did not aggress any sooner. With regard to the child's spontaneous aggressive play behavior, it can again be noted that the children who viewed the televised violence episode subsequently showed more aggressive play than those children in the control condition. In this instance, younger boys were the most likely to behave aggressively.

Additional analyses of the behavior of these same children (Ekman et al., 1971) suggested that subsequent aggressive behavior is related to the child's reaction during viewing. Boys aged five and six whose facial expressions were judged to display such positive emotions as pleasure, happiness, interest, or involvement while viewing televised violence were more likely to make hurting responses than boys whose facial expressions indicated displeasure or disinterest in such fare. In addition, reactions judged to display happiness while viewing violence were posi-

tively related to aggressive play. However, this relationship between emotional reactions while viewing and subsequent aggressive behavior was not found for girls at ages five and six.

Additional evidence bearing on age differences comes from a study by Leifer and Roberts (1971). These investigators compared children of three different age groups, ranging from four to 16 years old, on their understanding of the ostensibly subtle motivations and consequences that surround violent acts depicted on television. They asked each child about his own aggressive tendencies on a questionnaire given immediately after the child viewed televised violence. Aggressive reactions were measured in terms of the child's answers to a series of questions about conflict situations (e.g., "You are walking down the street. Some kid is mad at you and comes up and hits you. What do you do?" Possible answers are: "Hit them"; "Call them 'stupid' "; "Leave them"; "Tell a grownup"). One form of the questionnaire was developed for children four to ten years old, and another was developed for ten- to 16-year-olds.

In one experiment, 271 children (40 kindergarteners, 54 third, 56 sixth, 51 ninth, and 70 twelfth graders) were presented with a standard commercial television program that contained numerous episodes of violence. (A panel of adult judges had initially rated two programs, *Rocket Robin Hood* and *Batman*, as comprehensible by children four to five years old; two westerns, *Have Gun Will Travel* and *Rifleman*, as comprehensible by ten- to 12-year-olds; and two crime shows, *Felony Squad* and *Adam 12*, as appropriate for teenagers.) Each child was randomly assigned to view one of the appropriate programs. Immediately after the viewing, each child was questioned about his understanding of the motivations for and the immediate and final consequences of each of the violent episodes in the program. In addition, each child indicated the likelihood that he would behave aggressively by his choice of behavioral options in the hypothetical conflict situations described in the questionnaire.

The results showed that, as expected, there were consistent increases in understanding across the age range: kindergarteners could answer accurately only about one-third of the questions about either motivations or consequences; third graders could answer about one-half, and twelfth graders could answer about 95 percent. The majority of the kindergarten children did not understand very much about the settings of televised violence. Leifer and Roberts's findings suggest that for most young children, a violent act depicted on television is a singular event devoid of its context. For the young television viewers, violence evidently is often perceived in discrete punches.

The results suggest that both age and sex were important in predicting subsequent aggressive behavior: boys were consistently more aggressive than girls and aggressiveness tended to increase with age. However,

among the variables studied, one of the best predictors of the subsequent aggressive score was the amount of violence portrayed in the television program: children who viewed the more violent programs gave more aggressive responses, on the average, than those who viewed less violence $(p < .05)$.

Additional studies by the same investigators bear out the conclusion that adolescents comprehend the depicted motivations for and consequences of aggression better than younger children. However, there was little evidence in these studies that motivations or consequences had any influence on the effect of televised violence on aggressiveness. On the whole, the findings strongly suggest the importance of further investigation in this area, since it is often claimed that the context in which violence is portrayed modifies any effects such portrayals may have.

Feshbach (1971) provides evidence that an effective moderating influence may arise from the way televised violence is labeled. His findings support the hypothesis that being told about the reality or fantasy character of acts depicted on television will influence the subsequent behavior of viewers. Forty boys and girls, between nine and 11 years of age, viewed a six-minute film of a campus riot; the film was composed of both newsreel clips and segments of a Hollywood movie. On a random basis, half the children were told that the film was an NBC newsreel; the other children were informed that this was a film made in a Hollywood studio. After viewing this film, each child was required to play a guessing game with an adult, responding to the adult's errors by pressing buttons which allegedly caused noises of various degrees of loudness in the earphones that the adult was wearing.

The results indicate that, among the children who saw the riot film, those who were told that the violence was real subsequently produced louder noises in the laboratory game than those who were told that the violence was make-believe $(p < .01)$. On the other hand, the response level of children who viewed the fantasy aggressive program was actually lower than that of children who did not view an aggressive program $(p < .05)$. The latter finding provides one of the rare bits of support for the catharsis or inhibition hypothesis.

If positive findings are confirmed in subsequent studies, one would expect that when a program is clearly labeled as fiction, young viewers will react to it in a different way than if they are led to believe that the program is showing real events. However, it should be noted that Feshbach's results pertain to the behavior of children at an age when the labeling of a program (as fiction or as reality) can be clearly understood. It is not clear that the young child consistently perceives television entertainment programs to be fantasy. A considerable research literature on the thought processes of children (e.g., Piaget, 1954 and 1962) suggests that a distinction between what is "real" and what is "make-believe" in standard dramatic television programs is probably nearly impossible for

the young child below the age of six years. For older children, however, labels might reduce the tendency to display overt aggressive behavior among those who are disposed to be adversely stimulated by televised violence.

A full assessment of the impact of televised violence on children must, of course, include other forms of emotional reactions besides aggression. We have mentioned parents' complaints that many television programs stimulate anxiety reactions and produce sleep disturbances and nightmares in young children (e.g., Hess and Goldman, 1968; Lyle and Hoffman, 1971a and 1971b; Roberts and Baird, 1971). Very little systematic research has checked on these allegations; consequently, we simply do not know whether any types of television programs are likely to create sustained anxiety reactions in a sizable proportion of children.

Some pertinent findings bearing on children's dreams have been reported by Foulkes and his collaborators. Foulkes and Rechtschaffen (1964) have reported some evidence that viewing televised violence produced more vivid and emotional dreams in children. However, a more recent systematic followup study by Foulkes, Belvedere, and Brubaker (1971) assessed the impact of televised violence in a western program on the child's dream content (including manifestations of hostility, guilt, and anxiety) and found little or no measurable effect. This study was limited, however, to preadolescent boys (aged ten to 12). Whether younger children exposed to televised violence show any noticeable change in the degree to which their dreams are characterized by hostility, guilt, or anxiety remains an open question. In the absence of dependable evidence, we can draw no conclusions about the likelihood of sleep disturbances or other manifestations of anxiety in younger children.

General arousal as a source of instigation

All of the research discussed so far has been concerned with the effects of the portrayal of violence or aggression in communication content on subsequent behavior or attitudes. A radically different approach is presented in the progress report of Tannenbaum (1971).

In a program of research that began before this committee was formed and that will continue into the future, Tannenbaum has been investigating the hypothesis that the emotional arousal elicited by a communication affects the level or intensity of whatever subsequent behavior may occur. Arousal, then, is conceived of as independent of content as a predictor of effects.

Preliminary findings, based on college students, support the corollary proposition that content other than violent or aggressive material may instigate aggressiveness. With aggressive behavior measured by willingness either to administer electric shocks or to give negative ratings that might hurt another's career, the effects of videotapes or films judged to

be erotic, humorous, aggressive, or neutral in content were assessed in several experiments. The viewing of erotic and of humorous materials was followed by greater aggressiveness than the viewing of neutral material, and the viewing of erotic material was followed by greater aggressiveness than the viewing of aggressive material. The nature of the subsequent behavior, then, is conceived of as independent of content, as is the arousal.

However, Tannenbaum also has provided support for the proposition that violent or aggressive content can instigate aggressiveness. In these same experiments, the viewing of aggressive material was followed by greater aggressiveness than the viewing of neutral or humorous material.

Tannenbaum's preliminary findings also support a second corollary proposition—that aggressive content may instigate behavior which is nonaggressive, and in fact prosocial. In experiments designed to test this hypothesis, "humor reactions" of equal magnitude were found to follow a humorous film and an aggressive film. In addition, "rewarding behavior" (presentation to another person of tokens presumably redeemable for cash) was found to occur after both aggressive and nonaggressive stimulus films. Whether "aggressive" or "rewarding" behavior occurred appeared to be less a product of the film than of attitudes earlier engendered in the subjects regarding the recipient of the behavior.

It remains a matter of speculation whether general arousal should be taken as a complete explanation of any effects, with violent content having an effect on aggressiveness only through a special power to arouse, or whether specific content and consequent cognitive processes have an independent influence. The crucial test would involve comparison of the effects of aggressive content with and without the capacity to elicit emotional arousal. Unfortunately, such a test has not so far been made because aggressive content devoid of arousing capabilities is difficult— and, in fact, may be impossible—to devise.

The preliminary nature of this research suggests extreme caution in advancing any conclusions. If generalized arousal is verified either as the single or as a contributing factor, the interpretation of many findings as reflecting exclusively the instigating effects of aggressive content would have to be modified. However, what can now be said specifically about the capacity of violent or aggressive content to instigate aggressiveness would *not* be greatly affected. Instead, such effects of such content to a greater or lesser degree would become a special case of a more general phenomenon capable of more varied effects.

Other new research

A forthcoming study outside this research program is pertinent to the discussion in this chapter. Milgram and Shotland (in press) arranged

for the airing in different cities of three different versions of a highly rated prime time program. In one of the three versions (antisocial with consequences), a young man in need of money violently destroys a series of charity collection banks and pockets the money. He is ultimately arrested, suffers certain personal consequences, and experiences remorse. In a second version (antisocial without consequences), the young man succeeds in a harrowing escape and flees to Mexico, but is otherwise unpunished. In a third version (prosocial), the man's conscience overcomes him at the last moment; he does not break the banks, and various troubles he was suffering are cleared up without recourse to antisocial acts. A fourth "control" program from the same series dealt with an entirely different subject totally devoid of violence.

Samples of viewers of each of the four programs were thereafter invited to receive a free gift. Upon arrival at the gift distribution center they found themselves alone in a room confronted by a sign saying that the gifts were no longer available. Also present was a charity bank in important respects similar to the one that had been destroyed in the television program, along with implements that could be used to break it (a hammer and screwdriver, apparently left by a worker).

Generally, no main effect was observed, i.e., the rate of theft was not related to the program which the subjects had viewed. Where the breakage rate did vary significantly, it was related to differences in subject population and in response to such variables as the level of presumably frustrating conditions. These latter variables produced theft rates varying from 0 to 15 percent.

Null relationships were observed in relation to a second and more easily imitable act depicted in two versions of the program—an abusive telephone call. The investigators interpret the results to indicate that naturalistic viewing of the antisocial stimulus programs did not stimulate imitation of either of two antisocial acts, but they note three factors limiting the generalizability of their findings. First, the findings pertain only to the specific acts depicted in this program, and cannot be casually generalized to all television programs which depict aggression or antisocial behavior. Second, the study employed an adult population with no participants below the level of high school senior, and thus the findings may not be applicable to the effects of television on children. Third, in common with many other studies, the experiment does not examine the long-term, cumulative impact of television.

CONCLUSIONS

The available experimental evidence bearing on the effects of aggressive television entertainment content on children supports certain conclusions. First, violence depicted on television can immediately or

shortly thereafter induce mimicking or copying by children. Second, under certain circumstances television violence can instigate an increase in aggressive acts. The accumulated evidence, however, does not warrant the conclusion that televised violence has a uniformly adverse effect nor the conclusion that it has an adverse effect on the majority of children. It cannot even be said that the majority of the children in the various studies we have reviewed showed an increase in aggressive behavior in response to the violent fare to which they were exposed. The evidence does indicate that televised violence may lead to increased aggressive behavior in certain subgroups of children, who might constitute a small portion or a substantial proportion of the total population of young television viewers. We cannot estimate the size of the fraction, however, since the available evidence does not come from cross-section samples of the entire American population of children.

The research studies we have reviewed in this chapter tell us something about the characteristics of those children who are most likely to display an increase in aggressive behavior after exposure to televised violence. There is evidence that among young children (ages four to six) those most responsive to television violence are those who are highly aggressive to start with—who are prone to engage in spontaneous aggressive actions against their playmates and, in the case of boys, who display pleasure in viewing violence being inflicted upon others.

The very young have difficulty comprehending the contextual setting in which violent acts are depicted and do not grasp the meaning of cues or labels concerning the make-believe character of violence episodes in fictional programs. For older children, one study has found that labeling of violence on a television program as make-believe rather than as real reduces the incidence of induced aggressive behavior. Contextual cues to the motivation of the aggressor and to the consequences of acts of violence might also modify the impact of televised violence, but evidence on this topic is inconclusive.

Since a considerable number of experimental studies on the effects of televised violence have now been carried out, it seems improbable that the next generation of studies will bring many great surprises, particularly with regard to broad generalizations not supported by the evidence currently at hand. It does not seem worthwhile to continue to carry out studies designed primarily to test the broad generalization that most or all children react to televised violence in a uniform way. The lack of uniformity in the extensive data now at hand is much too impressive to warrant the expectation that better measures of aggression or other methodological refinements will suddenly allow us to see a uniform effect.

Several specific directions for subsequent inquiry are repeatedly suggested by the most recent studies. First, identify the predispositional characteristics of those subgroups of children who display an increase in